

REMARKS

The following is intended as a full and complete response to the Final Office Action dated October 30, 2007 and the Advisory Action dated January 23, 2008. In the Final Office Action, claims 1-6, 8-10, 21, 22, and 24-28 were examined. Claims 1-3 and 10 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Boucher (US 6,334, 153) and further in view of Chmielecki (US 5,740,467). Claims 4-6, 8-9, 21-22, and 24-28 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Boucher and Chmielecki, and further in view of Adams (US 6,775,693). These rejections are respectfully traversed.

The independent claims are amended in response to the Advisory Action, in which the Examiner stated that "no portion of the independent claims strictly defines each buffer to be of certain type or characteristics..." As amended, claims 1 and 10 each recite the limitation of a hardware subsystem configured to upload frame data to a user buffer in the system memory allocated to the application program, if the user buffer is available, and to a legacy buffer in a portion of the system memory that is not allocated to the application program, if the user buffer is not available. User buffers and legacy buffers are different types of buffers since they are stored in different portions of the system memory.

Boucher does not disclose or suggest these limitations. In particular, Boucher does not disclose redirecting the data to a legacy buffer when the user buffer is full. Therefore, the Examiner relies on Chmielecki for teaching redirecting the data to a legacy buffer when the user buffer is not available. A review of Chmielecki shows that this reference also does not teach or suggest this limitation.

Chmielecki discloses a system for transferring data to and from a host system. The host memory of Chmielecki contains receive buffers for storing data transferred from packet memory to the host system (see col. 10, lines 49-50). The data is stored in receive buffers that are filled in sequence according to a descriptor queue. Chmielecki does not teach using two different types of buffers to receive and store data in system memory. Therefore, Chmielecki does not teach or suggest storing the received data in a second type of buffer in system memory when a first type of buffer in system memory is not available.

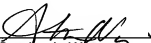
Chmielecki is completely silent regarding the transfer of data when receive buffers are not available in the host memory. However, the system of Chmielecki (see col. 9, lines 9-21) only accepts incoming data when "a sufficient amount of space is available in an empty receive data buffer in packet memory 16 to store a maximum size packet..." Therefore, the data to be transferred to the buffers in host memory remains in the packet memory when no buffers are available in the host memory. Similarly, the system described in Boucher queues packets not eligible for fast-path processing until a user buffer is available.

As the forgoing illustrates, neither Boucher nor Chmielecki teach or suggest uploading the frame data to a legacy buffer, in a portion of the system memory that is not allocated to an application program, when a user buffer, in the system memory allocated to the application program, is not available. Therefore, no combination of the cited references can render amended claims 1 and 10 obvious. For these reasons, Applicant submits that amended claims 1 and 10 are in condition for allowance and respectfully request withdrawal of the 35 U.S.C. § 103(a) rejection of these claims. Since claims 2-6, 8-9, 21, 22, 28, and new claim 29 depend from allowable claim 1 and claims 24-27 and new claim 30 depend from allowable claim 10, these claims also are in condition for allowance.

CONCLUSION

Based on the above remarks, Applicants believe that they have overcome all of the rejections set forth in the Final Office Action mailed on October 30, 2007 and that the pending claims are in condition for allowance. If the Examiner has any questions, please contact the Applicant's undersigned representative at the number provided below.

Respectfully submitted,



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